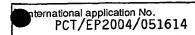
CLASSIFICATION OF SUBJECT MATTER
C 7 E21B21/08 E21B E21B47/12 According to International Patent Classification (IPC) or to both national classification and IPC **B. FIELDS SEARCHED** Minimum documentation searched (classification system followed by classification symbols) E21B IPC 7 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the International search (name of data base and, where practical, search terms used) EPO-Internal C. DOCUMENTS CONSIDERED TO BE RELEVANT Relevant to claim No. Citation of document, with indication, where appropriate, of the relevant passages Category ° 1,8 US 3 470 971 A (DOWER ETHELL J) 7 October 1969 (1969-10-07) abstract; claims 1,2 1,8 US 2001/050185 A1 (NELSON JOHN ET AL) Α 13 December 2001 (2001-12-13) paragraph '0022!; figure 2 1.8 US 6 352 129 B1 (BEST BRUNO) Α 5 March 2002 (2002-03-05) cited in the application column 4, line 59 -column 5, line 9; figure 2 US 2002/112888 A1 (LEUCHTENBERG CHRISTIAN) 1,8 Α 22 August 2002 (2002-08-22) see injetcor 22 abstract Further documents are listed in the continuation of box C. Patent family members are listed in annex. Special categories of cited documents: *T* later document published after the International filing date or priority date and not in conflict with the application but "A" document defining the general state of the art which is not considered to be of particular relevance cited to understand the principle or theory underlying the invention "E" earlier document but published on or after the international "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such docu-"O" document referring to an oral disclosure, use, exhibition or ments, such combination being obvious to a person skilled document published prior to the International filing date but later than the priority date claimed in the art. "&" document member of the same patent family Date of mailing of the international search report Date of the actual completion of the international search 21/09/2004 8 September 2004 Name and mailing address of the ISA Authorized officer European Patent Office, P.B. 5818 Patentiaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Tompouloglou, C Fax: (+31-70) 340-3016

INTERNATIONAL SEARCH REPORT



| Box II Observations where certain claims were found unsearchable (Continuation of Item 2 of first sheet) |
|---|
| This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons: |
| Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely: |
| 2. X Claims Nos.: 9,10 because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically: see FURTHER INFORMATION sheet PCT/ISA/210 |
| 3. Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a). |
| Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet) |
| This International Searching Authority found multiple inventions in this international application, as follows: |
| As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims. |
| 2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee. |
| 3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.: |
| 4. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the dalms; it is covered by claims Nos.: |
| Remark on Protest The additional search fees were accompanied by the applicant's protest. No protest accompanied the payment of additional search fees. |

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box II.2

Claims Nos.: 9,10

In contrast with the requirement of Rule 6.2(a) PCT claims 9, 10 rely entirely on the drawings.

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

Information on patent family members



| Patent document cited in search report | | Publication date | | Patent family member(s) | Publication date |
|--|-----|---------------------|------|----------------------------|------------------|
| US 3470971 | Α | 07-10-1969 | NONE | | |
| US 2001050185 | A1 | 13-12-2001 | BR | 0103198 A | 11-12-2001 |
| US 6352129 | ·B1 | 05-03-2002 | AU | 763081 B2 | 10-07-2003 |
| | | | AU | 5816800 A | 09-01-2001 |
| | | | BR | 0011830 A | 19-03-2002 |
| | | | CA | 2373515 A1 | 28-12-2000 |
| | | | CN | 1357076 T | 03-07-2002 |
| | | | EG | 22204 A | 31-10-2002 |
| | • | | WO | 0079092 A2 | 28-12-2000 |
| | | | GB | 2369638 A ,B | 05-06-2002 |
| | | | NO | 20016334 A | 21-02-2002 |
| US 2002112888 | A1 | 22-08-2002 | AU | 1932202 A | 01-07-2002 |
| | | | BR | 0116306 A | 02-03-2004 |
| | | | CA | 2432119 A1 | 27-06-2002 |
| | | | EP | 1356186 A1 | 29-10-2003 |
| | | | WO | 0250398 A1 | 27-06-2002 |
| | | | NO | 20032655 A | 11-08-2003 |
| | | | US | 2003079912 A1 | 01-05-2003 |